PATENT CLAIMS

1. A device for determining the driving capability of a driver in a vehicle, with an illumination device (1) for illuminating at least one of the driver's (12) eyes, a picture taking device (2) for taking pictures of the illuminated eye, an evaluation device (3) which serves to evaluate the pictures taken by the picture taking device (2), and a data storage (4),
characterised in that
the illumination device (1) illuminates with flash type light or intermittently at least one of the driver's (12) eyes, the evaluation device (3) comparing the measured values taken for the driver's pupil reaction by means of the picture taking device (2) with at least one normal value for a pupil reaction stored in the data storage (4), and when the normal value is not reached by the measured values for the pupil reaction, having an effect upon a control device (5) such that the vehicle is prevented from starting up or the vehicle in operational state is prevented from being driven on after it has stopped.

2. The device according to Claim 1,
characterised in that
an engine start up can be prevented by means of the control device (5).

3. The device according to Claims 1 or 2,
characterised in that
by means of the control device (5) engagement of at least the forward gears of the manual or automatic transmission (7) of the vehicle can be blocked.

4. The device according to any of Claims 1 to 3, characterised in that
when the measured values for the pupil reaction fail to reach the normal value for a pupil reaction stored, the evaluation device (3) actuates a signal transmitter (8) which emits an acoustic and/or optical warning signal.

5. The device according to any of Claims 1 to 4, characterised in that
the illumination device (1) has at least one flash light source.

6. The device according to any of Claims 1 to 5, characterised in that
the illumination device has at least one infra-red light source (10) which emits heat rays outside of the visible colour spectrum, the picture taking device (2) being formed by a camera device (16) sensitive to infra-red.

7. The device according to any of Claims 1 to 6, characterised in that
biometric data for at least one person relating to their iris structure, eye colour, distance between the eyes, eye area, nose size, mouth size and/or face shape can be stored in the data storage (4), and corresponding biometric data of the driver in question can be determined by the picture taking device (2), the evaluation device (3) for identifying the driver comparing the biometric data established with the stored biometric data, and if the data compared do not correspond within pre-specified tolerance limits having an effect upon at least one control device (5) such that the vehicle is prevented from starting up, or a vehicle in operational state is prevented from being driven on after it has stopped.

8. The device according to any of Claims 1 to 7, characterised in that
biometric data of at least one finger print can be stored in the data storage (4) and biometric data of a finger print of the driver in question can be determined by means of a sensor (9), the evaluation device (3) for identifying the driver comparing the biometric data established with the stored biometric data, and when the compared data do not correspond within pre-specified tolerance limits having an effect upon at least one control device (5) such that the vehicle is prevented from starting up or a vehicle in operational state is prevented from being driven on after it has stopped.

9. The device according to any of Claims 1 to 8, characterised in that
the picture taking device (2), the evaluation device (3) and/or the data storage (4) are provided with at least one interface for signal and/or data transfer.

10. The device according to any of Claims 1 to 9, characterised in that
the illumination device (1) and/or the picture taking device (2) are integrated in a vehicle sun visor (14) provided for the driver (12).

11. The device according to any of Claims 1 to 10, characterised in that
the evaluation device (3) actuates an illumination device (11) aligned or alignable to the visual field of the driver and which emits a diffuse, wide area of light which counters the driver's tiredness dependent upon a change to the visible size of the cornea surface, the lid closure frequency and/or the

lid closure duration of the eye and/or the occurrence of pupil diameter oscillations.

12. The device according to any of Claims 1 to 11, characterised in that if there is a functional failure of the picture taking device (2) and/or a functional failure of the illumination device (1) and/or a functional failure of the signal transmitter (8) emitting an acoustic and/or optical warning signal, the evaluation device (3) has an effect upon at least one control device (5) such that the vehicle is prevented from starting up or a vehicle in operational state is prevented from being driven on after it has stopped.